

IN THE CLAIMS:

Please cancel claims 1-14.

15. (New) A data receiving apparatus in a communication system for transmitting data upon changing over a parameter of a transmit signal in accordance with conditions of a propagation path, and, when the data cannot be received correctly on a receiving side, retransmitting the data, said apparatus comprising:

receiving means for receiving transmit data and retransmit data;

buffer means for storing the transmit data which contains an error;

combining means for input data with the retransmit data; and

extracting means for extracting data to be input to the combining means the input data from the buffer means,

wherein data length of the extracted data is controlled by the extracting means according to data length of the retransmit data.

16. (New) A data receiving apparatus according to claim 15, said apparatus

further comprising:

decoding means for executing decode processing based upon the combined data;

means for discriminating whether result of decoding is correct or erroneous; and

storing means for storing the combined data in said buffer means if the result of decoding contains an error.

17. (New) A data receiving apparatus according to claim 15, wherein said extracting means including:

means for comparing a first parameter that has been attached to the retransmit data and a second parameter that has been attached to the data extracted from said buffer means; and

data cutting means for cutting out part of the data, which has been extracted from said buffer means, and inputting it to said combining means if result of the comparison is that the conditions of the propagation path at the

time of retransmission are inferior.

18. (New) The data receiving apparatus according to claim 17, wherein said data cutting means includes:

means for discriminating data length of the retransmit data based upon a value of the first parameter; and

means for extracting and inputting to said combining means a portion of data having a length equal to said data length from the data that has been extracted from said buffer means.

19. (New) A data receiving apparatus according 17, wherein said extracting means further including:

extraction means for extracting data of a plurality of data that are to undergo retransmission combining from said buffer means and inputting these data to said combining means if result of the comparison is that the conditions of the propagation path at the time of retransmission are superior.

20. (New) A data receiving method in a communication system for

transmitting data upon changing over a parameter of a transmit signal in accordance with conditions of a propagation path, and, when the data cannot be received correctly on a receiving side, retransmitting the data, said method comprising steps of:

receiving for receiving transmit data and storing the transmit data which contains an error in a buffer;

receiving retransmit data;

extracting data from the buffer and controlling data length of the extracted data according to data length of the retransmit data; and

combining for the extracted data with the retransmit data.

21. (New) A data receiving method according to claim 20, said method further comprising steps of:

decoding for executing decode processing based upon the combined data;

discriminating whether result of decoding is correct or erroneous; and

storing the combined data in said buffer means if the result of decoding contains an error.

22. (New) A data receiving method according to claim 20, wherein said extracting step including:

comparing a first parameter that has been attached to the retransmit data and a second parameter that has been attached to the data extracted from said buffer; and

cutting out part of the data, which has been extracted from said buffer if result of the comparison is that the conditions of the propagation path at the time of retransmission are inferior.

23. (New) The data receiving method according to claim 17, wherein said data cutting step includes:

discriminating data length of the retransmit data based upon a value of the first parameter; and

cutting out a portion of data having a length equal to said data length

from the data that has been extracted from said buffer.

24. (New) A data receiving method according claim 17, wherein said extracting step further including:

extracting a plurality of data that are to undergo retransmission combining from said buffer if result of the comparison is that the conditions of the propagation path at the time of retransmission are superior.

25. (New) A transmitting apparatus capable of executing retransmission of packet data when the packet data cannot be received correctly on a receiving side, said apparatus comprising:

transmission parameter control means for changing over a transmission parameter in accordance with conditions of a propagation path when packet data is transmitted; and

retransmission mean for dividing packet data which has been transmitted to the receiving side, into plural portions when the transmission parameter is changed over by said transmission parameter control means so

that data amounts of the retransmission decreases, and retransmitting one of the plural portions as a packet data.

26. (New) A transmitting apparatus according to claim 25, wherein said retransmission means attaches an identifying information which is identical with an identifying information included in said packet data which has been transmitted, to the retransmitted packet data.

27. (New) A transmitting apparatus according to claim 25, wherein said retransmission means retransmits other portions as packet data after said retransmission.

28. (New) A transmitting method in a transmitting apparatus which executes retransmission of packet data when the packet data cannot be received correctly on a receiving side, said method comprising comprising of:

changing over a transmission parameter in accordance with conditions of a propagation path when packet data is transmitted;

dividing packet data which has been transmitted to the receiving side,

into plural portions when the transmission parameter is changed over so that data amounts of the retransmission decreases; and

retransmitting one of the plural portions as a packet data.

29. (New) A transmitting method according to claim 28, said method further comprises step of attaching an identifying information which is identical with an identifying information included in said packet data which has been transmitted, to the retransmitted packet data.

30. (New) A transmitting method according to claim 28, said method further comprises step of retransmitting other portions as packet data after said retransmission.

31. (New) A receiving apparatus which receives packet which is retransmitted from a transmitter when the packet cannot be received correctly on a receiving side, said apparatus comprising:

receiving means for receiving from the transmitter each divided packet which is obtained by dividing packet data which has been transmitted to the

receiving side and not received correctly, into plural portions and packetizing each portion.

32. (New) A receiving apparatus according to claim 31, wherein said receiving means executing receiving processing based upon the retransmission number for each divided packet.

33. (New) A receiving method which receives packet which is retransmitted from a transmitter when the packet cannot be received correctly on a receiving side, said method comprising:

receiving from the transmitter each divided packet which is obtained by dividing packet data which has been transmitted to the receiving side and not received correctly, into plural portions and packetizing each portion.

34. (New) A receiving method according to claim 33, wherein the receiving processing is executed based upon the retransmission number for each divided packet.

35. (New) A data receiving apparatus in a communication system for

transmitting data upon changing over a parameter of a transmit signal in accordance with conditions of a propagation path, and, when the data cannot be received correctly on a receiving side, retransmitting the data, said apparatus comprising:

a receiver unit for receiving transmit data and retransmit data;

a buffer for storing the transmit data which contains an error;

a combiner for input data with the retransmit data; and

an extraction unit for extracting data to be input to the combiner as the input data from the buffer,

wherein data length of the extracted data is controlled by the extraction unit according to data length of the retransmit data.

36. (New) A data receiving apparatus according to claim 35, said apparatus further comprising:

a decoder for executing decode processing based upon the combined data;

a discriminating unit for discriminating whether result of decoding is correct or erroneous; and

a storage control unit for storing the combined data in said buffer if the result of decoding contains an error.

37. (New) A data receiving apparatus according to claim 29, wherein said extraction unit including:

a comparator for comparing a first parameter that has been attached to the retransmit data and a second parameter that has been attached to the data extracted from said buffer means; and

a data unit for cutting out part of the data, which has been extracted from said buffer, and inputting it to said combiner if result of the comparison is that the conditions of the propagation path at the time of retransmission are inferior.

38. (New) The data receiving apparatus according to claim 37 wherein said data cutting units discriminates data length of the retransmit data based upon

a value of the first parameter and extracts and inputs to said combiner a portion of data having a length equal to said data length from the data that has been extracted from said buffer.

39. (New) A data receiving apparatus according 37, wherein said data unit extracts a plurality of data that are to undergo retransmission combining from said buffer and inputting these data to said combiner if result of the comparison is that the conditions of the propagation path at the time of retransmission are superior.

40. (New) A packet transmitting apparatus in a communication system for transmitting a packet signal upon changing over a parameter of a transmit signal in accordance with conditions of a propagation path, and, when the packet signal cannot be received correctly on a receiving side, retransmitting the packet signal, said apparatus comprising:

buffer means for storing a transmitted packet with identifying information and a modulation parameter appended thereto;

means for deciding a modulation parameter based upon conditions of the propagation path; and

retransmitting means for deleting a packet, for which successful reception has been sent back from a receiving side, from said buffer means, and retransmitting a packet, for which reception failure has been sent back from the receiving side, upon attaching identifying information and a modulation parameter prevailing at time of retransmission, with the retransmission being performed based upon a modulation scheme that conforms to this modulation parameter.

41. (New) The apparatus according to claim 40, wherein said retransmitting means includes:

means for comparing a modulation parameter that has been attached to packet data to be retransmitted and a modulation parameter conforming to the conditions of the propagation path prevailing at the time of retransmission; and

means for retransmitting a plurality of packets, which have been stored in said buffer means, as a single retransmission packet signal upon attaching respective ones of identifying information of these packets if result of the comparison is that the conditions of the propagation path at the time of retransmission are superior to those that prevailed at the time of the previous transmission.

42. (New) The apparatus according to claim 41, wherein said retransmitting means further includes means for retransmitting part of a packet, which has been stored in said buffer means, as a single retransmission packet signal upon attaching identifying information if result of the comparison is that the conditions of the propagation path at the time of retransmission are inferior to those that prevailed at the time of the previous transmission.